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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,256

07/11/2003

Mary B. Clark

1033-SS00387

3946

60533

7590

06/11/2008

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EXAMINER

JEAN GILLES, JUDE

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

06/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,256	Applicant(s) CLARK ET AL.	
	Examiner JUDE J. JEAN GILLES	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-17, 19-25 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 7, 18 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/27/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-6, 8-17, 19-25, and 27-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (hereinafter Jones) U.S. Patent No. 6,804,330 in view of Tully et al (Tully) U.S. Pub. No. 2006/0252490 A1, in further view of Cossock, US Pat. No. 5487166 A.

Regarding claim 1: Jones discloses the invention substantially as claimed. Jones teaches a multi-user database system comprising:

at least one processor (fig. 33, item 604);

at least one network interface coupled to the at least one processor, the at least one

network interface configured to receive transactions from a plurality of users (column 35, lines 15-34; column 39, lines 55-63; note that the inputs are the transactions received from the users), transactions including session maintenance transactions and data requests (column 35, lines 34-55); an accounting table to store data associated with the data requests (fig. 14, item 218; column 20, lines 50-52); however Jones does not disclose the details of “an event table to store an event log of the session maintenance transactions and a session table derived from the event table and the accounting table, the session table to store resource usage data associated with at least one user session”.

In the same field of endeavor, Tully discloses “ ... *According to another embodiment, all or some of the information in the game session database 600 may instead be stored at the controller 400. The table includes entries identifying game sessions (e.g., a game session associated with a set of event results) that have been played, or are being played, by a player. The table also defines fields 602, 604, 606, 608, 610, 612, 614, 616, 618 for each of the entries. The fields specify: a game session identifier 602; a game identifier 604; a total time period 606; an average time per event 608; a time remaining 610; a total wager amount 612; a wager balance amount 614; a cumulative payout amount 616; and a session status 618. The information in the game session database 600 may be created and updated, for example, based on information received from a player device and/or the controller 400 ...*” [see Tully; par. 0126].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tully's teachings of using both an event table and a session table to store the resource data associated with a user session with the teachings of Jones, for the purpose of improving the ability of a database to store resource usage data in connection with user session and event to increase system's reliability and efficiency

In addition Both Jones and Tully do not specifically teaches the step "wherein the resource usage data includes processor usage of the at least one processor and an input/output usage" in the context of the invention. Nonetheless this feature is well known in the art and would have been and obvious modification to the systems of Jones and Tully combined, as evidenced by Cossock. Cossock shows a method of collecting processor usage data among other usage information such as usage access data from both and internal and external storage resource (see Cossock; column6, lines 58-63).

An average skill in the art would be encouraged to incorporate Cossock's mechanism with the teachings of both Jones and Tully for the purpose of regulating memory management of database and storage systems for efficient, protected and convenient access to programs thereby coordinating access and usage of files and data by processes within a system as stated by Cossock, column 6, lines 64-67, continue on the next page, lines 1-5. By this rationale, **claim 1** is rejected.

Regarding claim 2: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the at least one processor is configured to determine from

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the session table a historical trend of the processor usage of the at least one user session, the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 3: the combination Jones-Tully discloses the multi-user database system of claim 1, wherein the at least one processor is configured to determine from the session table a historical trend of the input/output usage of the at least one user session, wherein the resource usage data includes input/output (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 4: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the at least one processor comprises more than one processor in a parallel processing environment (see Jones; column 30, lines 20-39).

Regarding claim 5: the combination Jones- Tully discloses the multi-user database system of claim 4, wherein the parallel processing environment is associated with an enterprise data warehouse (see Jones; column 30, lines 20-39).

Regarding claim 6: the combination Jones- Tully discloses the multi-user database system of claim 1, further comprising: a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the data requests [see Tully; par. 0126; 0132].

Regarding claim 8: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the session table is accessible to identify sessions that utilize a selected level of computing resources [see Tully; par. 0126; 0132].

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Regarding claim 9: the combination Jones- Tully discloses the multi-user database system of claim, wherein the session table is accessible to identify usage trends for resource utilization forecasting [see Tully; par. 0126; 0132].

Regarding claim 10: the combination Jones- Tully discloses a multi-user database system comprising:

a processor (see Jones; fig. 33, item 604);

a network interface coupled to the processor, the network interface configured to receive transactions from a plurality of users (see Jones; column 35, lines 15-34; column 39, lines 55-63), the transactions including session maintenance transactions and data requests (see Jones; column 35, lines 34-55);

an event table to store an event log of the session maintenance transactions [see Tully; par. 0126; 0132];

an accounting table to store data associated with the data requests(see Jones; fig. 14, item 218; column 20, lines 50-52); and

a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the transactions [see Tully; par. 0126; 0132] Wherein the resource usage data includes processor usage of the at least one processor and an input/output usage (see Cossock; column6, lines 58-63).

The same motivation and reason to combined employ for the rejection of claim 1 is also valid for this claim.

Regarding claim 11: the combination Jones-Tully discloses the multi-user database system of claim 10, wherein the processor is configured to determine from the session table a historical trend of the processor usage of the at least one user session, ~~the resource usage data includes CPU usage~~ (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 12: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the processor is configured to determine from the session table a historical trend of the input/output usage of the at least one user session, ~~wherein the resource usage data includes input/output~~ (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 13: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources(see Jones; column 30, lines 20-39).

Regarding claim 14: the combination Jones- Tully discloses the multi-user database system of claim 10, further comprising more than one processor in a parallel processing environment(see Jones; column 30, lines 20-39).

Regarding claim 15: the combination Jones- Tully discloses the multi-user database system of claim 14, wherein the parallel processing environment is associated with an enterprise data warehouse(see Jones; column 30, lines 20-39).

Regarding claim 16: the combination Jones- Tully discloses the multi-user database system of claim 10, further comprising: a session table derived from the event table and the accounting table, the session table to store resource usage data associated

with at least one user session [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 17: the combination Jones- Tully discloses the multi-user database system of claim 16, wherein the session table is accessible to identify high resource utilization sessions [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 19: the combination Jones- Tully discloses a method of tracking database system usage, the method comprising:

determining a set of new sessions from an event log data table to form a temporary session data table [see Tully; par. 0126; 0132; fig. 7];

matching entries in the temporary sessions data table with a set of request transactions to form a matched data table[see Tully; par. 0126; 0132; fig. 7];

preparing a sessions level summary from the matched data table [see Tully; par. 0126; 0132; fig. 7; fig. 6];

updating a session table, the sessions table to store resource usage data associated with the set of new sessions Wherein the resource usage data includes processor usage of the at least one processor and an input/output usage; and querying the sessions table to track database system usage [see Jones; column 35, lines 34-55; see Tully; par. 0126; 0132; fig. 7] (see Cossock; column6, lines 58-63).

The same motivation and reason to combined employ for the rejection of claim 1 is also valid for this claim.

Regarding claim 20: the combination Jones- Tully discloses the method of claim 19,

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wherein the processor is configured to determine from the session table a historical trend of the processor usage of the at least one user session, ~~the resource usage data includes CPU usage~~ (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 21: the combination Jones- Tully discloses the method of claim 19, wherein the at least one processor is configured to determine from the session table a historical trend of the input/output usage of the at least one user session, ~~wherein the resource usage data includes input/output~~ (see Jones; column 39, lines 52-67; column 40; lines 1-41; see Cossock; column 7, lines 18-35).

Regarding claim 22: the combination Jones- Tully discloses the method of claim 19, further comprising: determining a set of open sessions; and associating the set of open sessions with logoff events stored in the event log data table (see Jones; column 20, lines 18-43).

Regarding claim 23: the combination Jones- Tully discloses the method of claim 19, further comprising: determining a set of open sessions; associating running sessions with open sessions in the set of open sessions; and closing open sessions not associated with running sessions (see Jones; column 30, lines 20-39).

Regarding claim 24: the combination Jones- Tully discloses the method of claim 19, further comprising: preparing a request level summary from the matched data table; updating a request table, the request table to store resource usage data associated with the set of request transactions; and querying the request table to track resource usage [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 25: the combination Jones- Tully discloses the method of claim 24, wherein querying the request table includes providing data associated with resource inefficient transaction requests [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 27: the combination Jones- Tully discloses the method of claim 19, wherein querying the sessions table yields data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 28: the combination Jones- Tully discloses the method of claim 27, further comprising: allocating database resources based on the data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 29: the combination Jones- Tully discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a user identifier and a session identifier [see Tully; par. 0126; 0132; fig. 7; 0130].

Regarding claim 30: the combination Jones- Tully discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a user identifier and an account string [see Tully; par. 0126; 0132; fig. 7; 0130].

Allowable Subject Matter

4. Claims 7, 18, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2143

JJG

June 8, 2008